

# TIP 2013 – Highlights

Gabriele Garzoglio

GCC department

# An International Conference of Networking Experts

- A venue for several networking circles
  - ESNet / Internet2 Joint Techs
  - Asia-Pacific Advanced Network (APAN)
  - Tutorials
  - Workshops
- Some known faces (ANL, CMS, ...) and many new faces for me.

# Key Notes

- Michael McRobbie – Indiana University
  - Recounting history of Asian-Pacific Advanced Network
  - Data preservation in the digital era
    - Taking lessons from the Catholic Church for the preservation of classical texts
      - Maintain multiple copies of data
      - Associate copies with long lasting institutions – the Universities
- Paul Vixie – Internet Systems Consortium
  - Providing a historical DB of DNS entries
    - Access to DNS services from participants to fight cybercrime
- Ian Foster
  - Globus Online – New “Sharing” feature

# Status talks on global and regional initiatives

- LHC Open Network Environment (LHCONE)
  - Point-to-point dynamic circuit services
  - Software defined network through Openflow
  - PerfSONAR for network monitoring
- ESNet and Internet 2 updates
  - Focus on 100G
- APAN
  - Medical / Agricultural Working Group
  - Research and Education
  - Board meeting
- IPv6
  - Mission critical for education
  - Readiness in APAN / NASA / ...
- Software defined network
  - OpenFlow / 100G / ...
- ...many more...

# Closer to my world...

- OSG and LHC – the modular dashboard
  - GCC is currently involved in the Use Cases WG, AuthN/Z WG, contributing GridFTP end-to-end data in perfSONAR format, ...
- DYNES
  - Deployment of the network hardware at 50+ sites for dynamic circuit
  - NSF funds only the “instrument” – Now dedicated funding for LHC integration
  - Future opportunities for funding?
  - Wait-and-see attitude for the evaluation of the API
- 100G
  - ESNet 100G Testbed – experiences w/ OpenFlow, Congestion Control, RDMA, Security, High-Speed middleware...
  - 100G R&D at Fermilab
  - Australia’s research and education network (AARNet)
    - Deploying fast network for the Australian Square Kilometre Array Pathfinder
- Great conversations with Chris Kuun – South African National Research Network (SANReN)
  - Discussed opportunities to host engineers at FNAL funded by SANReN

